

## **Remarks**

### **I. Introduction**

In the final office action mailed August 10, 2009, the Examiner noted that Applicant had overcome the rejection of claim 40 under 35 U.S.C. § 101. However, the Examiner maintained the rejection of claims 21-40 under 35 U.S.C. § 103 as being allegedly unpatentable over U.S. Patent No. 7,082,107 ("Arvelo") in view of U.S. Patent Application Publication No. 2006/0182030 ("Harris"). Applicant has reviewed the cited art, amended the claims, and consequently requests favorable reconsideration in view of the following remarks.

Claims 21-40 are pending. Of these claims, claims 21, 26, 36, 37, and 40 are independent, and claims 22-25, 27-35, and 38-39 are dependent. Applicant has amended claims 21-23, 26, 28-29, 33-38, and 40. In the amendments made to independent claims 21, 26, 36, 37, and 40, Applicant has clarified the relationship between the error rates associated with output power levels and the identifying or adjusting of an output power level for a transmission.

### **II. Response to the Rejection of Claims under 35 U.S.C. § 103**

While Applicant recognizes that the Examiner has not had the opportunity to evaluate the pending claims in their currently amended form, Applicant nonetheless respectfully submits that each of the claims are allowable over the cited references.

The Examiner rejected the previously presented claims 21-40 under 35 U.S.C. § 103 as being allegedly unpatentable over U.S. Patent No. 7,082,107 ("Arvelo") in view of U.S. Patent Publication No. 2006/0182030 ("Harris"). Applicant respectfully submits that the cited references cannot form the basis for a *prima facie* case of obviousness for any of amended independent claims because the combination of the limited teachings of the cited references fails

to establish rational underpinnings supporting a conclusion that the pending claims were obvious at the time of invention. (*See* M.P.E.P. § 2142). In particular, the combination of the cited references fails to teach identifying a desired output power based at least in part on a determination that a second error rate is lower than a first error rate, wherein the second error rate is associated with an output power that is lower than the output power associated with the first error rate.

Independent claim 21 recites:

transmitting the plurality of packets at a second output power, wherein the second output power is less than the first output power;  
determining a second error rate associated with the transmission at the second output power;  
transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power;  
determining a third error rate associated with the transmission at the third output power; and  
determining whether the second output power is a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.

Independent claims 26, 36, 37, and 40 recite similar language. *See* claim 26 (“transmitting the plurality of packets at a second output power, wherein the second output power is less than the first output power; determining a second error rate associated with the transmission at the second output power; transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power; and determining whether the second output power is a desired output power based at least in part on a comparison between the first error rate, and the second error rate and a comparison between the second error rate and the third error rate”); claim 36 (“cause the transmitter to transmit the plurality of packets at a second output

power, wherein the second output power is less than the first output power; determine a second error rate associated with the transmission at the second output power; cause the transmitter to transmit the plurality of packets at a third output power, wherein the third output power is less than the second output power; determine a third error rate associated with the transmission at the third output power; and identify a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate"); claim 37 ("means for transmitting the plurality of packets at a second output power, wherein the second output power is less than the first output power; means for determining a second error rate associated with the transmission at the second output power; means for transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power; means for determining a third error rate associated with the transmission at the third output power; means for determining whether the second error rate is lower than the first error rate; means for determining whether the third error rate is lower than the second error rate; and means for identifying the second output power as a desired output power based at least in part on a comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.") and claim 40 ("transmitting the plurality of packets at a second output power, wherein the second output power is less than the first output power; determining a second error rate associated with the transmission at the second output power; transmitting the plurality of packets at a third output power, wherein the third output power is less than the second output power; determining a third error rate associated with the transmission at the third output power; determining whether the second error rate is lower than the first error rate; determining whether the second error rate is lower than the third error rate; and identifying a desired output power based at least in part on a

comparison between the first error rate and the second error rate and a comparison between the second error rate and the third error rate.”). None of the asserted references, alone or in combination, teach these claim limitations.

Applicants submit that the combination of Arvelo and Harris does not reasonably or logically lead to the claimed methods and systems recited by any of the independent claims. Arvelo teaches decreasing the transmission power only if the observed errors in a transmission are below a threshold, which addresses situations where the signal quality is “higher than desired” and transmission power can be decreased while maintaining a baseline level of performance. (*See* Arvelo, Fig. 1; col. 2, line 65 – col. 4, line 31). As such, Arvelo seeks to increase an error rate by decreasing the transmission power. Consequently, Arvelo fails to teach identifying a desired output power based at least in part on a determination that the second error rate is lower than the first error rate, wherein the second error rate is associated with a second output power that is lower than the first output power.

Harris similarly fails to lead to the pending independent claims. In Harris, a lower transmission power level is set when a transmission infrastructure switches to tolerate a higher error rate in transmission. As with Arvelo, the lower transmission power in Harris corresponds with a higher error rate, rather than a lower error rate. (*See* Harris, para. 0055). Thus, Harris does not recognize that a lower error rate could be determined when the transmission power is decreased. Since both Arvelo and Harris are focused on increasing a transmission error rate with by decreasing the transmission power, the combination of the references fails to lead to the pending independent claims.

Thus, Applicant respectfully submits that the combination of Arvelo and Harris does not reasonably lead to the methods and systems described in the independent claims, and thus cannot

establish a *prima facie* case of obviousness for independent claims 21, 26, 36, 37, and 40. In addition, and without conceding any of the Examiner's other statements, Applicants respectfully submit that claims 22-25, 27-35, and 38-39 are allowable for at least the reason that they depend from an allowable dependent claim.

### **III. Conclusion**

Applicants respectfully submit that all of the claims are patentable over the cited art. The Examiner is invited to call the undersigned at (312) 913-0001 with any questions or comments.

Respectfully submitted,

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